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CLAIMS:

- 1. A CATV system (8) comprising a primary station (2) and a secondary station (4), the CATV system (8) having a frequency band (12) with a plurality of substantially equally spaced and sized frequency channels (10), the CATV system (8) being arranged for transmitting data signals in at least part of the frequency channels (10) from the primary station (2) to the secondary station (4), the secondary station (4) comprising acquire means for acquiring a frequency channel (10) in which at least part of the data signals are transmitted, the acquire means being arranged for scanning the frequency band (12) in frequency steps from a starting frequency until a frequency channel (10) carrying data signals is found, characterized in that the frequency steps are substantially equal to the bandwidth of the frequency channels (10).
- 2. The CATV system (8) according to claim 1, characterized in that the acquire means are arranged for decreasing the size of the frequency steps when no frequency channel (10) carrying data signals can be found.
- 3. The CATV system (8) according to claim 1 or 2, characterized in that the primary station (2) comprises a cable modern termination system and in that the secondary station (4) comprises a cable modern.
- 4. The CATV system (8) according to claim 3, characterized in that the cable modern termination system and the cable modern are DOCSIS-compliant.
- 5. A secondary station (4) for receiving data signals in a frequency band (12) from a primary station (2), the frequency band (12) having a plurality of substantially equally spaced and sized frequency channels (10), the data signals being received in at least part of the frequency channels (10), the secondary station (4) comprising acquire means for acquiring a frequency channel (10) carrying at least part of the data signals, the acquire means being arranged for scanning the frequency band (12) in frequency steps from a starting

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frequency until a frequency channel (10) carrying data signals is found, characterized in that the frequency steps are substantially equal to the bandwidth of the frequency channels (10).

- 6. The secondary station (4) according to claim 5, characterized in that the acquire means are arranged for decreasing the size of the frequency steps when no frequency channel (10) carrying data signals can be found.
 - 7. The secondary station (4) according to claim 5 or 6, characterized in that the secondary station (4) comprises a cable modem.
 - 8. The secondary station (4) according to claim 7, characterized in that the cable modem is a DOCSIS-compliant cable modem.
- 9. A method of acquiring a frequency channel (10) carrying data signals, the frequency channel (10) being comprised in a frequency band (12) with a plurality of substantially equally spaced and sized frequency channels (10), the method comprising the step of scanning the frequency band (12) in frequency steps from a starting frequency until a frequency channel (10) carrying data signals is found, characterized in that the frequency steps are substantially equal to the bandwidth of the frequency channels (10).
 - 10. The method according to claim 9, characterized in that the method further comprises the step of decreasing the size of the frequency steps when no frequency channel (10) carrying data signals can be found.